

C. SUMMARY OF RECOMMENDED CALCULATIONAL PROCEDURES1. Piping Intersections

The GAI model for determining safe piping intersections is a vast improvement and much less restrictive than the method included in The Nuclear Safety Guide (reference 1, page V.B.4-5). Correlations of the GAI model with Monte Carlo calculations have shown it to be a conservative method for estimating safe piping arrangements.

In addition to the above methods, the Monte Carlo codes GEM 4 (reference 15, page V.B.4-5) and KENO (reference 16, page V.B.4-5) may be used for safely calculating piping reactivities in almost any arrangement. Correlations of GEM 4 with the Rocky Flats piping intersection experiments (reference 29, page V.B.4-6) have shown it to calculate k-effective to within two standard deviations of critical.